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IDENTIFICATION AND INTERPRETATION OF TECTONIC
FEATURES FROM SKYLAB IMAGERY

EREP Investigation No. 438

Monthly Report

March 1, 1975 - March 31, 1975

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EREI INVESTIGATION NO. 438

MONTHLY REPORT

March 1, 1975 - March 31, 1975

Title: Identification and Interpretation of Tectonic Features
from Skylab Imagery, Contract NAS9-14440

Status

During this period we pursued comparison between EREP S190-B color scene SL4-092-350 and U-2 color IR imagery (Frames 2755, 2757, 2759, Flight 72-112, Accession No. 00488, July 11, 1972) covering of the western Mojave Desert and eastern part of the San Bernardino Mountains. We also made progress in the tectonic interpretation of the results.

Significant Results

The fault pattern in the southern Nevada tectonic intersection and adjacent Mojave block was found to be consistent with a model partly suggested by Hamilton and Myers (1966). The model has the following basic elements:

- a) A major Laramide left-lateral shear on the Texas Zone.
- b) Counterclockwise rotation of the Sierra Nevada-Klamath Mountain block.
- c) Clockwise rotation of the Colorado Plateau.
- d) Crustal extension and intrusion of volcanics in Nevada.

Plans for Next Period

We plan to carry out a field trip to the western Mojave Desert for checking field evidence of recent faults observed in EREP and U-2 imagery.

Problems

None

Publications

Abdel-Gawad, M. and Linda Tubbesing, 1975, "Regmatic Transverse Shear in Southwestern North America": Proc. 1st International Conference on New Basement Tectonics, Utah Geological Association (in press).